

# When is Identity Congruent with the Self?

## A Self-Determination Theory Perspective

*Soenens Bart & Vansteenkiste Maarten*

Ghent University, Belgium

### Abstract

Within the identity literature, self and identity are often used as interchangeable terms. By contrast, in Self-Determination Theory (SDT; Ryan & Deci, 2003) both terms have a differentiated meaning and it is maintained that identities may vary in the extent to which they are congruent with the basic growth tendencies of the self that are fueled by the basic psychological needs for autonomy, competence, and relatedness. Specifically, the level of congruence between identities and the self is said to depend on (a) the motives underlying one's identity commitments (i.e., pressure versus volition) and (b) the content of the goals defining one's identity (i.e., extrinsic versus intrinsic). It is argued in SDT that both the motives and the goals behind one's identity are important for optimal functioning because of their linkage with basic need satisfaction. This chapter (a) compares the SDT view on identity development with prevailing models of identity formation, and with constructivist models of identity in particular, and (b) reviews research relevant to the idea that identities need to be congruent with the self in order to foster well-being and adjustment.

Soenens, B., & Vansteenkiste, M. (2011). When is identity congruent with the self? A self-determination theory perspective. In S. J. Schwartz, K. Luyckx, & V. L. Vignoles (Eds.), *Handbook of identity theory and research* (pp. 381-402). New York: Springer.

Ever since Erikson's (1968) formulations about identity development there is a general consensus among psychologists that identity formation represents a core feature of personality development during adolescence and through the lifespan. However, there is less agreement about the specific processes and dynamics involved in this developmental task. In particular, there is a longstanding debate in the identity literature between proponents of a 'discovery' perspective on identity and proponents of a 'construction' perspective on identity (Schwartz, Kurtines, & Montgomery, 2005; Waterman, 1984). According to proponents of the discovery perspective, the ultimate goal for individuals is to develop and cultivate those identity-relevant choices that are aligned with their true or authentic self (Waterman, 1984, this volume). In contrast, scholars advocating the construction perspective deny the existence of a true self. The criterion to evaluate whether identity development has been successful is not whether one's identity represents an underlying true self but whether the identity one has constructed has pragmatic value, that is, whether it is useful in enabling people to meet life challenges (Berzonsky, 1986, this volume).

Against the background of this debate, this chapter discusses formulations about identity development from Self-Determination Theory (SDT; Deci & Ryan, 1985, 2000; Ryan & Deci, 2000; Vansteenkiste, Ryan, & Deci, 2008), a broadband and empirically grounded theory of personality development and motivation. Although originally SDT was primarily concerned with the interplay between external contingencies (e.g., rewards) and inherently satisfying exploratory behavior (Deci, 1975), the theory steadily expanded over the past four decades and has been applied in various domains, such as education, sports, employment, and psychotherapy. Although SDT was not developed with the direct aim of studying identity formation, several of its core principles seem directly relevant to this developmental task.

Much like Erikson's (1968) theory and the discovery perspective on identity formation (Waterman, 1984), SDT involves an organismic perspective on human

development where the *self* is viewed as an innate and natural *process* that guides one towards more integrated and optimal functioning. In SDT it is argued that one's identity may or may not be congruent with the self and its basic growth tendencies (La Guardia, 2009; Ryan & Deci, 2003). As such, according to SDT the terms identity and self cannot be used interchangeably as they have a distinct meaning.

We first discuss some of Erikson's original formulations about identity development and then turn to a discussion of the SDT perspective on identity development. This discussion extends Ryan and Deci's (2003) initial SDT account of identity development by more explicitly pointing out similarities and differences between the SDT viewpoint and prevailing developmental theories on identity such as Erikson's theory and Marcia's (1980) identity status paradigm. Finally, we compare the SDT view with a number of prevailing constructivist models of identity, such as identity control theory (Kerpelman, Pittman, & Lamke, 1997) and Berzonsky's (1989, 1990) identity styles theory.

### **Erikson's Theory of Identity Development**

Central to Erikson's (1968) formulations about identity development (see Kroger & Marcia, this volume) is the idea that people build their identity on the basis of childhood identifications. Initially, children adopt particular values, ideas, and preferences from socialization figures (typically parents) in a rather literal, fragmented, and primitive manner, a process that Erikson (1968) referred to as *introjection*. During adolescence, individuals gradually start to explore their identity in a thorough and personal fashion. During this period of exploration, which Erikson (1968) referred to as a psychosocial moratorium, adolescents transform their childhood identifications into a coherent and personally meaningful identity.

Erikson (1968) noted that one's resulting sense of identity is more than the sum of one's early identifications: rather, a well-integrated identity refers to a Gestalt, which "arises from the selective repudiation and mutual assimilation of childhood identifications and their

absorption in a new configuration” (Erikson, 1968, p. 159). According to Erikson, for identity formation to be successful, individuals thus need to go through a process of internalization where identifications are assimilated into a set of coherent and unique commitments that are felt to reflect “who one is”. Such a crystallized set of commitments provides people with a sense of sameness and continuity. It also gives direction to life and allows individuals to organize their aspirations in a purposeful manner. Conversely, when people fail to make personally endorsed commitments, they risk ending up in a state of identity confusion, characterized by uncertainty and aimlessness.

Erikson’s (1968) view was later made amenable to empirical research by Marcia (1966, 1980; Kroger & Marcia, this volume) who defined identity as a self-structure, that is, as a person’s internal representation of who he/she is in terms of life goals, attitudes, and abilities. Marcia (1966) highlighted two aspects from Erikson’s theory on identity formation, that is, commitment and exploration. Commitment was defined by Marcia (1966) as the extent to which individuals adhere to and invest in identity-relevant choices. Exploration refers to individuals’ consideration of different options and possibilities before making choices or commitments. By crossing these two dimensions, Marcia (1966, 1980) defined four identity statuses, that is achievement (i.e., commitment with exploration), foreclosure (i.e., commitment without exploration), moratorium (i.e., exploration without commitment), and diffusion (i.e., lack of both commitment and exploration).

Marcia’s operationalization of Erikson’s theory initiated and stimulated abundant research on adolescent identity development. However, due to this focus on the identity statuses, the process of internalization as emphasized by Erikson (1968) became somewhat neglected. From Erikson’s perspective, it makes a difference whether commitments are adopted on the basis of coincidental situational circumstances and/or pressuring demands or whether commitments reflect an integrated system of personally endorsed values and

preferences. These differences in the internalization of commitments are not explicitly captured in measures based on Marcia's typology of identity statuses. Erikson's notion of successful identity formation as a process of internalization does play a major role in discovery models of identity (Waterman, 1984, this volume) and in the SDT perspective on identity development.

## **A Self-Determination Theory Perspective on Identity Formation**

### **Meta-Theoretical Assumptions**

To understand the SDT view on identity development, we first discuss its meta-theoretical and anthropological assumptions. First, SDT assumes that human beings actively contribute to their own development and should not be considered passive recipients that are completely determined by external forces. Second, human beings have an innate tendency to grow and to move forward, thereby increasingly developing differentiated, organized, and integrated identity structures. Third, this growth does not take place in a social vacuum, but the growth-oriented organism develops in a continuous interaction with the social environment, which can either foster or undermine one's growth (Deci & Ryan, 2000; Ryan & Deci, 2000).

SDT argues that the *self* represents human beings' growth-oriented tendency. Thus, the self is essentially viewed as a developmental tendency to evolve towards growth and towards higher levels of integration and organization. Further, it is maintained that the satisfaction of innate, psychological needs provides the energy necessary for this integrative process to take place. For reasons of parsimony, three basic psychological needs are distinguished: the need for competence, that is, the need to feel effective in realizing and obtaining desired outcomes (White, 1959); the need for autonomy, that is, the need to experience a sense of volition and psychological freedom in one's actions (deCharms, 1968); and the need for relatedness, that is, the need to feel connected with other people and to be

genuinely accepted in interpersonal relations (Baumeister & Leary, 1995). These needs are considered universal and essential, not only because they contribute to the integrative process of the self, but also because they represent necessary ingredients for one's well-being and health. When these needs are satisfied, people will flourish and display signs of healthy and adaptive functioning. When these needs are thwarted, people become vulnerable to less than optimal adjustment or, in severe cases, even to psychopathology (Ryan, Deci, Grolnick, & La Guardia, 2006). Below we will argue that need satisfaction represents a key factor that will facilitate the development of a well-integrated identity, whereas need thwarting will impede identity development or even give rise to identity diffusion.

These claims about the nature of human development converge with the anthropological assumptions in Erikson's (1968) theory. Erikson's belief in the process of organismic growth is expressed most explicitly in his formulations about the epigenetic principle of development. According to Erikson, human development arises from an innate and universal ground plan that, given adequate environmental support, gradually unfolds and drives people toward higher and more sophisticated modes of functioning at interrelated levels (e.g., cognitive, social, and emotional). Much like SDT, Erikson emphasized that this process of maturation occurs in a constant reciprocal interaction with the social environment, such that adequate environmental support not only creates the necessary conditions for maturation to take place but that maturation also affords new and increasingly satisfying opportunities to interact with the social environment: "It is important to realize that in the sequence of his most personal experiences the healthy child, given a reasonable amount of proper guidance, can be trusted to obey inner laws of development, laws which create a succession of potentialities for significant interaction with those persons who tend and respond to him and those institutions which are ready for him" (Erikson, 1968, p. 93).

In SDT it is assumed that individuals' growth tendency (i.e., the self), which is energized by the satisfaction of one's basic psychological needs, is manifested in three ways (Vansteenkiste, Soenens, & Niemiec, in press), that is, as (a) intrinsic motivation, (b) internalization, and (c) the adoption of growth-promoting values. Whereas both intrinsic motivation and internalization deal with the quality of the motives underlying people's actions and commitments (i.e., autonomous vs. controlled), the adoption of growth-promoting values deals with the type of goals people pursue (i.e., intrinsic vs. extrinsic).

Consistent with Marcia's (1980) definition, we view identity as the set of characteristics, values, aspirations, and representations that people use to define themselves. SDT posits that individuals' identity may or may not be consistent with individuals' growth tendency (i.e., the self). Specifically, as outlined in greater detail in the following paragraphs, the level of consistency between self and identity is said to depend on the extent to which one's identity is driven by the three manifestations of the self. SDT's view on the self differs from other theories about self and identity in a number of ways. First, by delineating the self from identity SDT differs from the practice common in the identity literature of using "identity" and "self" as largely interchangeable terms. Second, in SDT the self is viewed as a lifelong developmental tendency towards growth rather than as the outcome of the developmental task of identity formation. In this respect, SDT also differs from the discovery perspective on identity development (Waterman, 1984, this volume). Although SDT and the discovery perspective on identity share many features, the discovery perspective has been criticized by some for having a rather reified view on identity, that is, a view where one's identity is a predetermined "thing", waiting to be discovered. Berzonsky (1986), for instance, argued that the term 'authentic self' suggests that people have an innate and predetermined identity that needs to be discovered as one grows older. In SDT, the self is not viewed as such a predetermined and fixed set of authentic values and interests. Instead, the self in SDT refers

to individuals' natural inclination for growth and it is assumed that this growth tendency can manifest itself in many forms. The content of one's identity is likely to be determined by a complex interaction between genetic dispositions (e.g., talents and preferences) and responses by the social environment. Moreover, the content of a person's identity may also shift across time. Thus, in SDT it is not argued that the content of individuals' identity is innate, determined, and ready to be discovered. It is argued, however, that individuals' identity may or may not be consistent with the self as an organismic growth tendency. When an identity provides opportunities for need satisfaction, it is said to reflect the self. In contrast, when an identity detracts from need satisfaction, it is said to be alien to the self. Having made these conceptual remarks, we now turn to a discussion of the "why" of identity formation (dealing with the motives behind identity formation) and the "what" of identity formation (dealing with the values behind identity formation).

### **The "Why" of Identity Formation**

As outlined by Marcia (1980), individuals engage in different types of identity 'work' in the process of constructing a personal identity, the most important of which is exploratory behavior. We argue that individuals can have different motives to engage in the exploration of identity-relevant alternatives and choices. In addition, individuals can have different motives to adopt and hold on to identity commitments. Further, we argue that motives for identity exploration are positively related to motives for identity commitment (Assor, Cohen-Malayev, Kaplan, & Friedman, 2005). For instance, it seems likely that people who felt pressured to explore identity options will adopt and protect their identity commitments with a sense of pressure and coercion once their identity is established (La Guardia, 2009).

**Intrinsic motivation.** Some activities are intrinsically motivated, that is, they are pursued for the inherent enjoyment experienced in the activities themselves. When intrinsically motivated, people experience their behavior as inherently enjoyable or satisfying,



which contributes to their well-being and optimal functioning (Ryan & Deci, 2000). The growth oriented process of intrinsic motivation is relevant for the process of identity formation in at least two ways. First, most of the exploratory behavior that is readily apparent in toddlers and that is displayed by adolescents who are in the process of searching a well-fitting identity is intrinsically motivated. Spontaneous curiosity and the eagerness to master new challenges are key motives to explore the outer world and to find out which identity options are most interesting. This notion is consistent with Kashdan and colleagues' claim that the exploration of novel and challenging opportunities is typically driven by curiosity and intrinsic motivation (Kashdan & Fincham, 2004; Kashdan, Rose, & Fincham, 2004).

Second, not only the explorative behavior itself, but also the subsequent making of identity-relevant commitments and choices may directly follow from people's natural inclinations and interests, hence representing a direct manifestation of the self. An adolescent who embarks on a psychology study because he is genuinely curious about human nature and because he anticipates that studying psychology will be an interesting challenge is making an identity-relevant choice on the basis of intrinsic motivation. Intrinsically motivated behaviors are engaged in with a sense of spontaneity, willingness, and autonomy. In attributional terms, they are characterized by an internal perceived locus of causality (deCharms, 1968).

**Internalization process.** However, many behaviors displayed in daily life are extrinsically rather than intrinsically motivated. Extrinsically motivated behaviors have a means-end structure, that is, these behaviors are functional in obtaining a particular outcome that is separable from the activity itself. Yet, extrinsically motivated behaviors vary in the extent to which they have been internalized, that is, in the extent to which they are congruent with the self and, as such, provide opportunities for need satisfaction. The process of internalization refers to the tendency to transform socially valued mores, norms, and rules into personally endorsed values and self-regulations (Deci & Ryan, 1985; Ryan, 1993). Translated

to the process of identity formation, this means that both one's exploratory behavior and the making of identity-relevant commitments and choices can be more or less internalized in nature.

Consistent with Erikson's (1968) writings, SDT maintains that, whereas some people pursue, adopt, and maintain identity commitments that are consistent with the self and that reflect their preferences and sensibilities, others pursue identity commitments that are alien to the self (Ryan & Deci, 2003). Different from Erikson, SDT provides a detailed and empirically grounded account of the process of internalization, which is represented as a continuum consisting of four types of regulation that reflect increasing internalization and integration.

At the lowest level of the continuum, people's behaviors, values, and beliefs are said to be externally regulated. With external regulation, people engage in exploratory behaviors or adopt identity commitments because they feel pressured from without. Their behavior is driven by attempts to obtain external contingencies (e.g., a reward) or to avoid punishment, criticism, and disapproval. The value of the behavior or identity element is not internalized at all, as it does not even reside in the person. For instance, an adolescent may gather information about law studies because this provides him with approval from his parents who always wanted their son to be a lawyer. Externally regulated commitments are not consistent with the self and are only maintained as long as the externally controlling pressures (e.g., from socializing agents or peers) are present. As such, one may even argue that externally regulated commitments cannot be considered real commitments and are not even part of one's identity. Such 'commitments' have not been internalized at all and are not used by people to define who they are.

One step further on the internalization continuum, people adopt an identity on the basis of introjected motives. Introjection entails a regulatory mode where people have "taken

in” a value, yet do not fully accept this value as their own. Although the regulation resides in the person, it is not fully congruent with the self and the basic psychological needs. Specifically, introjection may cause an inner conflict stemming from the approach-avoidance conflict one is facing when being driven by introjected motives. People with an introjected regulation would adopt identity commitments to avoid feelings such as shame, guilt, disappointment, and inferiority or to increase their feelings of self-worth and pride. At the same time, because of the stressful and conflicting feelings associated with internally pressuring forces such as shame and guilt, people would rather renounce the further pursuit of those commitments, thus developing an ambiguous orientation towards their identity. To illustrate, a last year high school student might be exploring different future study possibilities to avoid feeling guilty for making the wrong choice. It is striking that both Erikson (1968) and SDT scholars use the term introjection to refer to a rather constricted type of regulation reflecting only partial internalization. Although introjected identity commitments, relative to externally regulated commitments, might be longer adhered to, the adherence is likely to be rigid and obsessive. Because one’s identity is not fully congruent with the self, it is of a rather unstable and insecure nature (see also the literature on insecure self-esteem, e.g., Heppner & Kernis, this volume), leading one to react defensively against any person who challenges one’s adopted identity (Hodgins & Knee, 2002). Because both an external and introjected regulation are accompanied by feelings of pressure and alienation, they are both considered expressions of a controlled mode of functioning.

Introjection is a particularly interesting type of regulation because it illustrates the necessity of distinguishing between the terms identity and self. Indeed, introjection is a critical point on the internalization continuum because, although identity commitments that have been introjected reside in the person and, as such, are part of one’s identity, these commitments are not fully congruent with the self. Specifically, the case of introjection

illustrates that, in SDT, the distinction between an external or an internal regulation of commitments is considered less critical than the distinction between a controlled or an autonomous regulation of commitments. Although an introjected mode of regulation is internal in nature (i.e., people try to meet intrapersonal demands), it comes with feelings of pressure and thus represents a controlled type of functioning. Research has shown that introjection is associated with more defensiveness, less persistence, and less well-being relative to the fully internalized and autonomous types of regulation (Assor, Vansteenkiste, & Kaplan, 2009; Koestner & Losier, 2002). This suggests that people can function less than optimally even when their behavior is internally regulated.

A relatively more autonomous type of regulation is *identification*. When people identify with the value of a commitment or choice, they feel volitional in maintaining and behaving on the basis of that commitment because they experience the commitment as a reflection of who they are. When people understand the personal relevance of their behavior and their identity-relevant choices, they have accepted the behavioral regulation as their own, that is, they have almost fully internalized the behavioral regulation. For instance, a last year high school student might explore different study possibilities at the university because he believes it is truly important to be well-informed before making any identity-choice. Or, an emerging adult may choose to leave the parental home to live independently and consider his new-found residential independence as an identity-relevant choice that he fully endorses (Kins, Beyers, Soenens, & Vansteenkiste, 2009).

A final step towards full internalization requires the integration of the identified regulation with the other self-endorsed aspects of one's identity. *Integrated regulation* refers to the process of bringing together various personal values and identity-relevant commitments in a meaningful manner, which might require considerable effort and a high level of reflection and self-awareness. Behaviors and commitments that are integrated are not only valued and

meaningful (i.e., identified with), but are brought into alignment with other self-endorsed values and goals. In some instances people identify with the personal importance of an activity, but the identification is still compartmentalized and inconsistent with other self-endorsed values and goals. For instance, a person may endorse an individualistic and highly competitive attitude at work yet display a compassionate and caring attitude towards his family members. Most likely, these two interpersonal orientations will not be experienced by the person as expressions of a single underlying, deeply held set of values but would instead be experienced as compartmentalized or isolated. As such, a lack of integration is antithetical to the feeling of temporal-spatial continuity that would characterize successful resolution of the identity crisis (Erikson, 1968).

To sum up, in SDT internalization represents the process through which identity-relevant explorations and commitments are increasingly brought into alignment with the self. SDT's position on the role of internalization in identity formation is akin to both the discovery perspective on identity and to Erikson's theory. It is assumed that, the more exploratory behaviors and identity commitments are undergirded by autonomous and well-internalized (relative to controlled) motives, the more these behaviors and commitments will satisfy the basic needs for autonomy, competence, and relatedness, which, in turn, will foster well-being and adjustment (Luyckx, Vansteenkiste, Goossens, & Duriez, 2009). Specifically, individuals with autonomous (rather than controlled) commitments are likely to experience a greater sense of psychological freedom in carrying out identity-relevant activities, become more skilled at them, and get more social support from others while engaging in them.

An important issue to address in future work is how (motives) for identity exploration are related to the motivational dynamics behind the internalization of identity commitments (Assor et al., 2005). We hypothesize that, on average, a thorough and deliberate exploration of identity alternatives is essential to arrive at well-internalized, secure, and need-satisfying

identity commitments. This is because identity exploration would enhance the likelihood of discovering identity-relevant preferences and choices that are deeply and genuinely satisfying.

We would, however, like to qualify this hypothesis in two ways. First, the formation of high-quality (i.e., autonomous and well-integrated) commitments may not necessarily require a long and systematic process of exploration. This is because identity-relevant choices and commitments that have been made intuitively and instantly (i.e. without going through an extended phase of reflection and questioning) can also be highly need satisfying. This might particularly be the case with choices based on intrinsically motivating activities. We speculate that exploration is particularly important for choices and commitments that are not immediately and intrinsically appealing, that is, for choices and commitments that need to be internalized and integrated.

Second, identity commitments arrived at through exploration may not necessarily be well-internalized or autonomous in nature, because some forms of identity exploration are driven by controlled rather than autonomous motives. A pressured type of exploration can take the form of compliance, where adolescents experience the external demand to explore. Or, alternatively, it can take the form of defiance, where adolescents explore in an attempt to react against environmental pressures to commit to choices they do not endorse. Such controlled types of exploration are likely to be either superficial or rather radical in nature (Assor et al., 2005). In the case of radical exploration, adolescents question their commitments in a highly emotional and oppositional fashion. Both superficial and radical exploration are unlikely to result in identity commitments that reflect one's abiding values and preferences. In contrast, when adolescents explore their identity for autonomous reasons, they are more likely to engage in an open-minded and reflective type of identity exploration, such that one's identity choices more accurately reflect deeply held values and preferences.

**Contrasting the SDT perspective on motives for identity with other views.** To provide some further conceptual clarification to SDT's unique view on motives for identity development, we briefly contrast the SDT perspective with two commonly cited views on identity, stating (a) that people typically build an identity to obtain a sense of self-esteem, and (b) that it is most adaptive in current post-modern society to adopt a chameleon-like and fragmented identity.

***Self-esteem as an identity motive.*** Several identity scholars claim that identity development is to a large extent driven by a desire for self-esteem (Gregg et al., this volume; Sedikides & Gregg, 2003; Sedikides & Strube, 1997). According to these scholars, the protection and enhancement of self-esteem is not only a highly endorsed and almost universal motive for self-development, it is also an adaptive motive fostering well-being and adjustment.

These claims are inconsistent with the SDT perspective on identity. According to SDT, when people are driven by attempts to enhance their self-esteem or to avoid lowered self-esteem, they are functioning on the basis of an introjected regulation (Deci & Ryan, 2000). This is because the active pursuit of self-worth is likely to invoke ego-involved concerns which in turn create feelings of internal pressure and conflict (Niemic, Ryan, & Brown, 2008; Ryan, 1982; Ryan & Brown, 2003). Specifically, when driven by self-worth concerns individuals would engage in conditional self-acceptance; they would only evaluate themselves positively (and may even engage in self-aggrandizement) when their behaviors meet their standards. Conversely, they would devalue themselves with feelings of self-criticism and inferiority when they fail to meet their identity-related standards. The fragile and contingent sense of self-esteem resulting from the active pursuit of self-worth would not only result in a half-hearted and constricted type of behavioral engagement but would also have a

cost in terms of emotional problems (Assor, Roth, & Deci, 2004; Heppner & Kernis, this volume). As such, the pursuit of self-esteem is not considered a healthy motive in SDT.

It should be noted that this view does not deny the possibility that identity development can contribute to self-esteem. Indeed, it is likely that feelings of positive self-worth and competence will follow when individuals have developed a clear and coherent identity. Ironically, however, identity development is less likely to be successful and to contribute to self-esteem when the pursuit of self-esteem provided the initial impetus and motivation for identity formation. In this regard, Sheldon (2004) advocated the use of “a sidelong approach” to self-esteem where people avoid focusing on self-esteem as a central and highly conscious motive for their endeavors. When people instead focus on their authentic interests and values while pursuing goals or identity-relevant choices, self-esteem is likely to follow as an unintended by-product of the goal pursuit. In sum, although self-esteem may be an adaptive developmental outcome of successful identity construction, SDT contends that identity development may be hampered when it is motivated by self-esteem concerns.

***Post-modern views on identity development.*** Sociologists and philosophers have noted that the post-modern era is characterized by proliferation of different societal views, lifestyles, and identity possibilities (Braeckman, 2000). Psychologists made a similar analysis. For instance, Cushman (1990) argued that the self, which he viewed largely as a function of the dominant cultural norms and rules, “experiences a significant absence of community, tradition, and shared meaning” in the post-war era (p. 600). In existential psychological terms, the gradually lessening impact of social structures has created an *existential vacuum*. Several researchers (e.g., Arnett, 2002) recognize that, in the absence of unifying and institutionalized systems of meaning, people nowadays are faced with the task of choosing among a wide and exponentially increasing variety of lifestyles, values, and roles.



Some post-modern psychologists argue that the most adaptive response to the increased complexity of modern-day society is to adopt a chameleon-like identity that consists of different (and potentially incoherent) commitments in different life contexts and that fluctuates across time as the demands of life change (Gergen, 1991). This view is inconsistent with the theory of Erikson (1968) which highlights the idea of an identity configuration, that is, a set of multiple identifications that have been integrated through processes of assimilation, absorption, and organization (Schachter, 2004). It is also inconsistent with the organismic approach of SDT in which the experience of multiple but compartmentalized identity commitments is viewed as fragmentation and represents non-optimal functioning (Ryan & Deci, 2003). Indeed, the concepts of identified and integrated regulation on the internalization continuum were precisely distinguished from one another to make this point: although a particular identity might be personally endorsed, it might still be relatively isolated and even conflicting with other personally subscribed identity commitments. The lack of harmony that characterizes these co-existing commitments suggests that they are not fully integrated and therefore not fully consistent with the self.

The argument that the adoption of a chameleon-like identity represents a non-optimal response to the task of identity formation constitutes yet a different reason why the concept of identity needs to be conceptually differentiated from the growth-oriented self, as conceived within SDT. The self as the process of self-regulation and integration is an ongoing, fundamental, and innate process that has been operational throughout the history of mankind. From such a perspective, the self can never be empty as the self does not need to be constructed on the basis of prevailing norms and rules, as conceived by Cushman (1990). However, we do acknowledge that the integrative work of the self as a process can be hindered by societal pressures. Specifically, the increasing number of identity routes and life style options may – at least for some people (e.g., people struggling with indecisiveness) –

place the self-integrative process under pressure. Recognizing the increasing difficulty for people to achieve a sense of unity and integration does not imply, however, that the self as such would be empty.

**Empirical findings on the autonomous (versus controlled) regulation of identity.**

Research supports the idea that when people regulate identity-relevant goals on the basis of autonomous or volitional rather than controlled or pressured reasons, they are more likely to experience well-being and vitality. For instance, in line with the work of Emmons (1986), Sheldon and colleagues assessed the motives and quality of internalization behind individuals' self-generated life goals, which increases the personal significance of the goals being rated. For each of these goals, participants are asked to rate the extent to which they engage in these goals for autonomous or controlled motives. Sheldon and Kasser (1995) found that, compared with controlled reasons, autonomous reasons for pursuing life goals were related positively to a variety of well-being and healthy personality outcomes, including openness, empathy, self-actualization, and vitality. In subsequent longitudinal studies by Sheldon and Elliot (1998, 1999), autonomous motives behind one's goal pursuit were found to positively predict effort investment in one's goal, goal attainment, need satisfaction, and well-being, whereas controlled reasons for goal pursuit did not predict goal attainment and were unrelated or negatively to need satisfaction and well-being.

Another body of work worth mentioning in this context is Waterman's (1993, 2005, this volume) research on personal expressiveness. Drawing from Aristotle's philosophical formulations on eudaimonia and from the discovery perspective on identity, Waterman (1993) defined personal expressiveness as a subjective state associated with activities that are consistent with one's daimon, that is, the core of individuals' potentialities. Similar to well-integrated activities and commitments, personally expressive activities would come with feelings of self-realization and well-being. Personal expressiveness has indeed been found to

relate to adaptive outcomes and processes such as intrinsic motivation, flow, self-actualization, and vitality (e.g., Waterman, 1993, 2005).

In a more direct examination of the motivational dynamics underlying the making of identity commitments, Soenens, Berzonsky, Vansteenkiste, Dunkel, and Papini (submitted) examined the relative contribution of the strength of identity commitments and the motives behind these identity commitments in the prediction of late adolescents' well-being. Consistent with previous research (Marcia, 1980), the strength of identity commitments was related positively to a number of well-being variables (i.e., self-esteem, agency, and absence of depressive symptoms). Importantly, the motives behind commitment added to the prediction over and above the effect of commitment per se, with autonomous motives relating positively and controlled motives relating negatively to well-being.

Increasingly, research is also showing that the beneficial outcomes associated with an autonomously regulated identity generalize across cultures. SDT has sometimes been mistakenly interpreted as arguing that people need to develop a separate, unique, and independent identity, that is, an identity that differentiates people from others. Such an independent orientation would be less common and less adaptive for people in collectivist cultures who tend to emphasize and value interdependence rather than independence (e.g., Markus & Kitayama, 1996; Suh, Diener, Oishi, & Triandis, 1998; for a review, see Smith, this volume). However, autonomy as understood in SDT is different from people's tendency to build their identity on the basis of independent and individualist values or on the basis of interdependent or collectivist values (Ryan, 1993). Chirkov, Ryan, Kim, and Kaplan (2003), for instance, asked respondents from different nations (Korea, Russia, Turkey, and the United States) to rate how much they endorse individualist and collectivist practices. Next, respondents were also asked to indicate why they endorse those values, that is, for autonomous or controlled reasons. In each of the four nations studied, it was found that the

endorsement of cultural values for autonomous rather than controlled reasons contributed to well-being beyond the effect of the cultural values per se. Such findings indicate that both individualist and collectivist values can be more or less internalized (i.e., regulated on the basis of autonomous rather than controlled motives) and that the level of internalization is universally beneficial for well-being.

Together, there is increasing empirical evidence that not all identity-relevant goals or commitments are created equally. Those identity commitments that are pursued for intrinsic motives, that are well internalized (i.e., autonomous), or that are experienced as personally expressive, appear to contribute to positive well-being and adjustment whereas commitments that are poorly internalized (i.e., controlled) relate to decreased well-being and developmental problems. Notably, whereas a number of studies have addressed the motivational dynamics behind the making of commitments, no research has been conducted on individuals' motives for identity exploration. It seems worthwhile to examine in future research whether there are qualitative differences (i.e., autonomous and controlled) in individuals' motives for identity exploration and whether these differences relate to the quantity and quality of identity commitments and to personal well-being.

### **The “What” of Identity Formation**

The processes of intrinsic motivation and internalization deal with the reasons *why* people explore different identity options or adopt and hold on to particular choices and commitments. Apart from the reasons underlying people's identity commitments, the content (i.e., *what*) of people's identity-relevant choices and aspirations may be more or less congruent with the growth tendencies of the self (Deci & Ryan, 2000; Kasser, 2002; Vansteenkiste, Soenens, & Duriez, 2008).

**Identity commitments based on intrinsic rather than extrinsic goals.** Some people primarily direct their identity commitments towards intrinsic goals, such as community

contribution, self-development, and affiliation. For instance, a last year high school student might choose to embark on medical studies because he wants to make a difference for children in underdeveloped countries. Intrinsic goals reflect a “being orientation” focused on the actualization of one’s personal interests, values, and potential (Kasser, 2002). Intrinsic goals are labeled intrinsic because these goals are more likely to lead the person to have experiences that can satisfy inherent psychological needs for autonomy, competence, and relatedness. Put differently, intrinsic goal pursuit is more *inherently* related to basic need satisfaction.

Other people organize their identity commitments predominantly around extrinsic goals (e.g., financial success, social recognition, and physical appeal). For instance, a last year high school student might decide to study medicine to become financially successful. *Extrinsic goals* exemplify salient aspects of capitalism and consumer culture, in which fame, money, and a perfect physical appearance are often portrayed as ultimate signs of success (Dittmar, this volume; Kasser & Ryan, 1993, 1996). Extrinsic goals involve a “having orientation” and their appeal mostly lies within the anticipated power, admiration, and sense of worth that might be obtained by realizing them. Extrinsic goals are considered extrinsic because they will often drive people away from opportunities to satisfy the basic psychological needs of autonomy, competence, and relatedness.

Let us take an example to illustrate how goal-content is related to basic need satisfaction (see Vansteenkiste, Soenens, & Duriez, 2008, for a more extensive discussion). A boy who considers good looks as an important identity element is likely to feel pressured to meet the prevailing cultural expectations about attractiveness advertised in the media, thus undermining his need for autonomy. In addition, driven by the goal of physical attractiveness, he is likely to compare himself to others and to perceive others as competitors. The feelings of jealousy and the objectifying stance towards others resulting from this competitive

interpersonal orientation are likely to undermine his need for relatedness. Further, he is unlikely to ever feel capable of fully accomplishing his goal of being beautiful, such that his need for competence becomes chronically frustrated.

Several other researchers have – at least implicitly – pointed to the possible problems associated with the pursuit of extrinsic goals. For instance, Dittmar (2007; this volume) argued that the consumption industry spreads the myth that the ideal and happy life involves building an identity that is centered around the pursuit and achievement of material wealth and the perfect body. Dittmar equally emphasized the critical role of social comparison to social standards and ideals when extrinsic aspirations such as ‘the material good life’ and ‘the body perfect’ are adopted. Because modern-day ideals for material success and thin-ideal attainment are excessively high, most people fall short of meeting these ideals. As a consequence, when oriented towards extrinsic goals, people will almost invariably experience a discrepancy between their actual identity and their ideal identity. This discrepancy would then result in negative feelings and, in the long run, in a pervasive sense of identity deficit and subsequent maladjustment (Dittmar, 2007; Kasser, 2002).

It is important to note that individuals’ most fundamental and deep-held goals will ultimately determine whether one’s identity provides opportunities for need satisfaction or not. This is important because the goals people display at the surface may not always be the goals they hold deep down. For example, a person may appear to be oriented towards community contribution because he volunteers in charity organizations, yet he may use this engagement as a way to gain recognition and popularity (i.e., an extrinsic goal). The fundamental goal of this person – referred to by Ryan, Huta, and Deci (2008) as the first-order goal – is extrinsic rather than intrinsic in nature. As a consequence, this person’s identity is mainly colored by extrinsic aspirations and may, as such, detract the person from need-satisfying experiences.

**Empirical findings on the intrinsic (versus extrinsic) goal contents underlying identity.** A growing number of studies provide evidence for the claim that building an identity centered around intrinsic, rather than extrinsic, goals yields more personal and social benefits. Research addressing this hypothesis has typically relied on the Aspiration Index (Kasser & Ryan, 1993, 1996), a questionnaire providing scores for a number of intrinsic and extrinsic goals. Studies have consistently shown that the more extrinsic (vs. intrinsic) life goals occupied a central place in people's goal-structures, the more people tended to experience lower psychological well-being (e.g., Kasser & Ryan, 1993; Ryan, Sheldon, & Kasser, 1995) and higher psychological ill-being (e.g., Kasser & Ahuvia, 2002; Kasser & Ryan, 1993). These results have been obtained across the life-span and in various countries across the world. The harmful effects of the pursuit of extrinsic goals are not limited to individuals' personal well-being but also extend to their interpersonal functioning. In their close relationships with others, extrinsically oriented individuals are more likely to use their friends to get ahead in life and they engage in more conflictual and less trustful romantic relationships (Kasser & Ryan, 2001).

Further, it has been shown that the negative interpersonal attitudes and behaviors of extrinsically oriented individuals also have an impact on larger groups in society such as foreigners and immigrants. Duriez, Vansteenkiste, Soenens, and De Witte (2007) found a strong and positive association between an extrinsic versus intrinsic goal orientation and racial prejudice. Duriez et al. demonstrated that this association was longitudinally mediated by a Social Dominance Orientation (SDO), that is, an orientation characteristic of individuals with a preference for a society that is divided into clearly delineated and hierarchically organized groups. The association between extrinsic (versus intrinsic) goal pursuit and SDO suggests that extrinsically oriented individuals are prejudiced because they perceive the world as a highly competitive place where one needs to devalue others to obtain scarce goods.

Finally, an extrinsic (relative to intrinsic) value orientation is negatively related to behaviors that are beneficial to society as a whole and to the environment. Brown and Kasser (2005) demonstrated that such a value orientation negatively predicted the engagement in pro-ecological behaviors, and was associated with an enlarged ecological footprint. Similarly, Richins and Dawson (1992) found materialism to negatively predict a life-style characterized by low consumption and ecological responsibility.

**Threats to identity security as an antecedent of extrinsic goal pursuit.** It has been argued that the pursuit of extrinsic goals is determined at least partly by the extent to which such goals are promoted in one's direct environment (modeling) and the extent to which people feel insecure and psychologically threatened (Kasser, 2002). Within the current analysis, we focus especially on the latter developmental source. The idea that psychological threat prompts extrinsic goal behaviors implies that when people feel insecure about their identity they might be more likely to gear themselves towards extrinsic goals because those goals may hold the promise of immediate relief from such existential threat. Because extrinsic goals are increasingly promoted by mass media in Western society and globally (Kasser, Kanner, Cohn, & Ryan, 2007), they are often highly visible and salient, and may as such be perceived as attractive routes to happiness and self-worth.

Addressing the idea that identity insecurity is involved in the processes associated with pursuit of extrinsic goals (and materialism in particular), Kasser and Kasser (2001) analyzed the dreams of people low and high in materialism and found that highly materialistic individuals dreamt more frequently about insecurity themes, such as death. Kasser and Sheldon (2000) experimentally manipulated feelings of existential insecurity by having students write about their own death. They found that, relative to control participants, those asked to ponder on their own death, expected to earn more money in the future and to spend more money for pleasure. Participants in the death manipulation condition also displayed a



more greedy orientation. Extending this line of work, Sheldon and Kasser (2008) showed that the experimental induction of economic and existential threat led to a stronger endorsement of extrinsic, relative to intrinsic, goals. Thus, extrinsic goals are typically valued as a means to compensate for psychological insecurity.

Why would people hold on to extrinsic goals given that they provide little, if any, well-being benefits? Extrinsic goals seem to have an addictive feature because people believe that such goals will bring need satisfaction and happiness, a phenomenon referred to as affective forecasting (Sheldon, Gunz, Nichols, & Ferguson, 2010). However, people rarely feel capable of fully realizing their extrinsic goals and, even if they do, the accomplishment of such goals brings short-lived rather than deep and long-lasting satisfaction. To cope with the subsequent feelings of discontent and insecurity, people typically embrace their extrinsic goals even stronger, thereby getting trapped in a negative vicious cycle which has been referred to by Dittmar (2007) as the “the cage within”.

**Distinguishing goals from motives.** Both motives (i.e., autonomous and controlled) and goals (i.e., intrinsic and extrinsic) are conceptually related in that the pursuit of intrinsic goals is often based on autonomous reasons, whereas the pursuit of extrinsic goals is often guided by controlled reasons. Research typically found correlations around .30 between intrinsic goal striving and autonomous regulation and between extrinsic goal striving and controlled regulation (Sebire, Standage, & Vansteenkiste, 2008, in press; Sheldon & Kasser, 1995; Sheldon, Ryan, Deci, & Kasser, 2004). These correlations suggest that intrinsic versus extrinsic goals and autonomous versus controlled regulations represent related yet distinct process (Deci & Ryan, 2000). For instance, it is possible to donate for charity (i.e., an intrinsic goal) to avoid feeling guilty for not doing so (i.e., controlled regulation) or because one fully endorses the importance of charity (i.e., autonomous regulation). Although research has shown that the content of goal pursuit and the motives for goal pursuit are not fully

independent, it has also been shown that both predict independent variance in well-being (e.g., Sheldon & Kasser, 1995). Apparently, both autonomous (relative to controlled) motives and intrinsic (relative to extrinsic) goals represent crucial ingredients for optimal development.

Although at least some studies examined associations between identity processes (identity insecurity in particular) and extrinsic (vs. intrinsic) goals, it should be noted that research on identity and the content of identity-relevant goals is scarce. Future researchers may want to examine associations between Marcia's (1966) identity statuses and extrinsic (vs. intrinsic) goals. We predict that although both adolescents in the foreclosure and diffusion statuses may be prone to adopt extrinsic goals, they might do so for different reasons. As they are highly sensitive to societal and interpersonal expectations and approval, foreclosed adolescents would adopt extrinsic goals because these goals are highly valued and promoted, at least in contemporaneous individualistic societies. In contrast, diffused adolescents would adopt extrinsic goals because, as discussed earlier, such goals hold the promise of providing an immediate and ready-made solution for the feelings of existential emptiness and threat that come with a poorly developed and shallow identity. For diffused adolescents, extrinsic goals would thus represent a compensatory mechanism to cope with their identity insecurity.

### **Comparing SDT with Constructivist Identity Theories and Models**

Contrary to SDT's organismic view on identity, the meta-theoretical assumptions of which are largely consistent with a discovery metaphor of identity (Waterman, 1984), most of the prevailing models in identity research are constructivist in nature and are based on the construction metaphor of identity formation (Berzonsky, 1986). Common to these constructivist models is the idea that individuals create, maintain, and revise their identity through a process of monitoring, comparing, and incorporating of feedback received from the social environment. In these models, it is assumed that people actively interact with the social environment to build their identity from a blank slate. In Berzonsky's model in particular, the

ultimate criterion to evaluate successful identity formation is whether one's identity has pragmatic value, that is, whether it effectively helps people to adjust to life challenges and to meet requirements of the social environment (Berzonsky, 1986, 1990, this volume). Below, we briefly discuss a number of constructivist models that currently prevail in the literature and compare these with SDT's organismic identity model. Finally, we describe how identity construction processes and organismic identity processes may interact to predict adaptive development and adjustment.

### **Prominent Constructivist Models of Identity Formation**

**Identity control theory.** One overarching constructivist model of identity is identity control theory (Grotevant, 1987; Kerpelman, Pittman, & Lamke, 1997; Serpe & Stryker, this volume). This theory assumes that people compare their identity standards – that is, the self-defining labels that denote who people think they are – to perceptions of themselves obtained through social information and feedback. People would continuously compare their internal identity standards to how they are perceived by others and would maintain or alter their identity standards depending on the outcome of this comparison process (Kerpelman et al., 1997). In case there is a match or convergence between identity standards and social perceptions, one would maintain one's identity because it then adequately represents oneself in the social world and, as such, has pragmatic value in providing meaning and in solving problems. In case there is a discrepancy (or error) between identity standards and the social feedback received about oneself, however, one's identity needs to be adjusted. Identity formation thus entails a process of trying to find equilibrium between internal identity standards and social experiences.

Based on cognitive developmental theory (Piaget, 1977), it has been proposed that this dynamic equilibrium is maintained through the processes of identity assimilation and identity accommodation (Whitbourne & Collins, 1998; Whitbourne, Sneed, & Skultety, 2002).

Identity assimilation refers to the interpretation of identity-relevant social information in terms of already established identity standards, such that one's identity standards do not need to be altered. Identity assimilation may be functional and even adaptive as long as there are only minor discrepancies between identity standards and social information. However, when discrepancies are large, one's identity may be in need of a more thorough revision. Revision of one's identity is achieved through the process of accommodation, which involves substantially altering one's identity standard or even replacing it with a new standard such that one's newly adopted identity fits again with the social environment.

**Berzonsky's identity style model.** Another prominent representative of constructivist thinking about identity is Berzonsky's identity style model. Much like identity control theory, Berzonsky (1989, 1990, this volume) focuses on the social-cognitive processes through which people build, evaluate, and refine their identity constructions. Rather than outlining the general mechanisms (e.g., discrepancy reduction) that underlie identity formation, Berzonsky focuses on interpersonal differences in the way people cognitively approach the process of identity exploration. Specifically, he distinguishes between three identity styles.

An information-oriented identity style is typical of individuals who actively seek out information and deliberately evaluate information before making a commitment. Using a rational, open, and cognitively complex style of information-processing, these individuals would flexibly switch back and forth between assimilation and accommodation. A normative style is typical of individuals who orient themselves towards expectations from significant others and social norms when making identity decisions. They tend to hold on rigidly to the commitments that they adopted from significant others, thereby defending their rigid self-views against discrepant information. Hence, they use a predominantly assimilative cognitive style. A diffuse-avoidant style is characteristic of individuals who procrastinate identity choices. Because they do not personally explore identity alternatives and options, they

typically fail to arrive at solid and personally endorsed commitments. Instead, they tend to adjust their identity standards to situational demands in a chameleon-like fashion, thereby using a predominantly accommodative cognitive style.

### **Similarities and Differences Between Constructivist Models and the SDT View on Identity**

The constructivist identity models and the SDT perspective on identity formation share some common features. First, both perspectives share the idea that people actively contribute to their own development and, as such, differ from the view defended by behaviorists that human development is passively determined by the social environment through processes of reinforcement and stimulus-response associations.

Second, both perspectives highlight the importance of the social environment in developing a sense of personal identity. Whereas constructivist models emphasize the role of the social environment as a source of social feedback that continuously interacts with individuals' self-representations (through assimilation and accommodation), SDT stresses that interpersonal factors contribute to (or potentially hinder) the processes of internalization and integration. Whereas controlling interpersonal environments would detract from internalization and adaptive identity formation, autonomy-supportive and need-satisfying environments would create opportunities for the integrative and growth-oriented tendencies of the self to function optimally (Grolnick, Deci, & Ryan, 1997; Ryan & Deci, 2003).

In spite of these similarities, there are also a number of differences between both perspectives. Perhaps the most important difference is that SDT assumes a fundamental and innate growth-oriented human tendency (i.e., the self) whereas this is not necessarily the case in constructivist models. This difference in perspective has at least three consequences. First, constructivist models and SDT highlight a different criterion to evaluate adaptive identity development. Whereas constructivist models stress the importance of functional and

pragmatic utility, SDT emphasizes the importance of the degree to which identity behaviors and commitments are experienced as need-satisfying. Importantly, in some cases, identity development meets one criterion but not the other, and vice versa. For instance, for a child raised in an authoritarian home it may seem like a pragmatic choice to comply with parental demands and to adopt the parents' values into his identity without questioning those values. Such a 'normative' response may help the child to avoid conflict and may even yield parental recognition and praise. It is questionable, however, whether this child's rule-abiding and submissive orientation is need-satisfying because the child might feel pressured to adopt the parents' values and, as such, may not experience a sense of autonomy.

Second, constructivist models sometimes imply a *relativistic* perspective on identity evaluation (e.g., Berzonsky, 1986, 1990, this volume). In a relativistic perspective, any identity commitment or any style of exploring one's options can be beneficial or detrimental, as its effectiveness depends on the level of discrepancy that one experiences between one's identity and the feedback received from the social environment. For instance, it could be argued that a normative identity style is beneficial in highly structured environments such as the army. In contrast, it follows from organismic models such as SDT that people can evaluate their identity in *absolute* terms; that is, the key factor to evaluate identity commitments is whether they are consistent with individuals' growth tendency, as reflected for instance in feelings of intrinsic enjoyment in the pursuit of an identity-related goal. As such, SDT entails a *universalistic* viewpoint where the adaptive value of a particular identity choice primarily depends on whether one's identity is consistent with the basic psychological needs of the self. Identity commitments that are regulated by autonomous (rather than controlled) motives and commitments that are based on intrinsic (rather than extrinsic) goals would be conducive to adjustment, irrespective of the level of fit between individuals' motives and goals and those of the social environment.

As an example, this organismic position implies that a person who adopted his identity out of internally demanding motives (i.e., introjection) is at risk for decreased well-being, even when his environment would be controlling in nature or would strongly appeal to internal imperatives such as guilt, shame, and loyalty. Similarly, a person who built his identity around extrinsic goals would be at risk for maladjustment, even when his extrinsic identity fits well with extrinsic goals that prevail in his social environment. Consistent with this universalistic reasoning, several studies have shown that the undermining effects of extrinsic, relative to intrinsic, goal pursuit were also present when people were in a social environment that strongly supported and encouraged extrinsic goals, such as business schools (Vansteenkiste, Duriez, Simons, & Soenens, 2006), law schools (Sheldon et al., 2004), and the world of fashion (Meyer, Enstrom, Harstveit, Bowles, & Beevers, 2008).

One may object to this reasoning by arguing that a lack of fit between one's identity and the social environment may have negative ramifications for the need for relatedness because it may alienate a person from the environment. A lack of fit may not always frustrate one's need for relatedness, however. A person who is able to keep an intrinsic interest in his work even though he is in a highly competitive and controlling workplace might be more likely to have high-quality interpersonal relations at work compared to a colleague who feels controlled to work. Conversely, a situation of person-environment fit may not always provide opportunities for satisfaction of the need for relatedness. A person who strongly endorses materialistic values within a materialism-oriented social environment is not likely to build genuine and mutually satisfying interpersonal relationships. Instead, this person seems likely to view others as competitors and rivals, an attitude that may undermine rather than facilitate the need for relatedness.

A third consequence of the fact that constructivist models typically do not assume the existence of an innate growth tendency is that constructivist models are less clear about the

processes that energize identity formation. Constructivist models illuminate *how* people construct their identity without specifying the source of energy that may foster this identity work. In a similar vein, Schwartz (2002) argued that constructivist models primarily deal with the path or process of identity formation, at the expense of attention for the driving forces behind identity formation. Many of the identity-related processes involved in constructivist models (e.g., exploring identity alternatives and choosing among different possible commitments) are energy-consuming. Constructivist models have difficulty answering the question where people get the energy to engage in these processes and how individual differences in engagement in identity construction processes can be explained. The concepts of self and basic need satisfaction help to answer these questions. In SDT, the self is viewed as a source of energy and growth that, ideally, provides individuals with opportunities to use increasingly sophisticated strategies of self-regulation, including strategies of identity construction (Luyckx et al., 2009; Ryan & Deci, 2003). When people's basic psychological needs are satisfied, they would have the vitality and energy necessary to engage in identity construction strategies. In contrast, when people's needs are thwarted, they may be more likely to take less energy-consuming short-cuts on the path to identity formation, thereby either defensively guarding their identity against any form of change (i.e., a predominantly assimilative mode) or adopting volatile and situation-specific identity commitments (i.e., a predominantly accommodative mode). Although such short-cuts may yield some short-term benefits, they represent derivative and compensatory modes of identity construction that, in the long run, may fail to result in a well-balanced identity.

### **The Combined and Interactive Role of Identity Construction and Identity Discovery Processes**

As we argued in the preceding paragraph, in at least some respects SDT and constructivist models of identity are based on diverging meta-theoretical and anthropological



assumptions. Although both perspectives may not be fully compatible at a fundamental meta-theoretical level, we do believe that the processes forwarded within both perspectives are (a) real and important and (b) mutually related in meaningful ways (see Schwartz, 2002, for a similar view). Specifically, we argue that the *how* of identity formation, as conceived within constructivist models, will vary as a function of the psychological energy available to the self, as conceived within SDT's organismic identity model. As argued in the preceding paragraph, processes of identity construction may be at least partially fueled by organismic processes such as internalization and need satisfaction.

Consistent with this hypothesis, it has been found that personality orientations and interpersonal factors that satisfy basic psychological needs relate positively to the use of more sophisticated identity construction processes whereas factors that thwart need satisfaction are related to immature or defensive identity strategies. Soenens, Berzonsky, Vansteenkiste, Beyers, and Goossens (2005), for instance, found that an autonomous causality orientation – reflecting a person's dispositional tendency to function in a volitional fashion – is positively related to an information-oriented identity style whereas a controlled causality orientation was related to a normative identity style. It has also been found that need-thwarting parenting undermines individuals' identity construction capabilities. Controlling and intrusive parenting, for instance, has been found to relate to decreased commitment making capabilities (Luyckx et al., 2007) and to a diffuse-avoidant style (Dunkel, Soenens, Berzonsky, & Papini, 2009; Smits et al., 2008).

In addition, it can be predicted that the type of goals people adopt (i.e., intrinsic versus extrinsic) will be relevant to the quality of identity construction processes. Specifically, because the pursuit of extrinsic goals would be unrelated to need satisfaction or might even frustrate the basic needs, it would inhibit the use of identity construction processes that require vitality and openness of functioning. Instead, the pursuit of extrinsic goals would

activate derivative and relatively more defensive ways of processing identity-relevant information. Consistent with these hypotheses, Smits, Soenens, Luyckx, Duriez, and Goossens (2007) found that both the personal pursuit of extrinsic (versus intrinsic) goals and the parental promotion of extrinsic goals were negatively related to an information-oriented identity style and positively related to the normative and diffuse-avoidant identity styles.

In a more direct examination of the idea that basic need satisfaction fosters adaptive identity construction processes, Luyckx et al. (2009) found positive associations between a measure of satisfaction of the three needs and commitment making, identification with commitment, and exploration (both in depth and in breadth). Satisfaction of the three needs related negatively to ruminative exploration, a type of exploration characterized by repetitive and excessive brooding typically resulting in a lack of firm commitments (see Luyckx, Schwartz, Goossens, Beyers, & Missotten, this volume).

Research is thus increasingly confirming that need satisfaction and need-supportive factors foster adaptive identity construction. Conversely, adaptive identity construction processes may also create opportunities for need satisfaction and volitional functioning (Ryan & Deci, 2003). In line with this, Schwartz et al. (2000) have shown that, compared to individuals with a diffuse-avoidant style, individuals with an information-oriented identity style are more likely to experience their choices and activities as personally expressive. Finally, Luyckx et al. (2009) found that global need satisfaction did not only predict identity construction prospectively but was also significantly predicted by some of the identity construction variables. Exploration in breadth, for instance, was found to predict increasing levels of global need satisfaction, supporting the idea that exploration increases the likelihood of making need-satisfying identity choices. In sum, need satisfaction and identity construction are not mutually exclusive but appear to be mutually reinforcing one another in a reciprocal fashion. These findings and formulations are also in line with the developmental model

proposed by Schwartz (2002) in which it is argued that processes of identity construction and identity discovery represent reciprocally related and essential ingredients for adaptive identity development and self-realization.

Apart from merely examining associations between need satisfaction and processes of identity construction, some studies have also examined need satisfaction as a moderator of identity construction processes. The latter studies typically address the idea that the effectiveness and adaptive value of processes of identity construction depend on whether these processes occur under need-satisfying or need-thwarting conditions. Luyckx, Soenens, Berzonsky, et al. (2007), for instance, examined whether the effects of an information-oriented style would be moderated by an autonomous causality orientation in predicting commitment and well-being. It was found that an information-oriented identity style was only positively related to confidence about one's commitments and to self-esteem under conditions of high autonomy. Smits, Soenens, Vansteenkiste, Luyckx, and Goossens (in press) expanded on these findings by directly measuring the motives behind the use of information-oriented and normative identity styles. It was found that, when these identity styles were pursued for relatively more autonomous (versus controlled) motives, they were related to higher well-being and more solid commitments. It seems therefore, that a mentally effortful style (i.e., the information-oriented style) pays off primarily under conditions of autonomous (rather than controlled) motivation. Conversely, the disadvantages of a less mature and more defensive style (i.e., the normative style) seem to be offset at least partially when this style is used on the basis of autonomous (versus controlled) motives. Together, these findings suggest that processes of identity construction and processes of identity discovery interact in complex ways to predict identity-relevant outcomes and general adjustment.

## **Conclusion**

In the identity literature, self and identity are sometimes used as interchangeable terms. By contrast, in SDT both terms have a differentiated meaning. The self is viewed as an innate and natural process that guides one towards more integrated and optimal functioning and that is reflected most directly in and sustained by the satisfaction of three basic human needs. Individuals' *identity* – the internal self-structure representing who one believes one is (Marcia, 1980) – may or may not be congruent with the self and its basic growth tendencies. By differentiating the concept of identity from the process of self, as conceptualized within SDT, it becomes clear that not all identity commitments are created equally. Depending on the reasons underlying one's identity (i.e., autonomous versus controlled) and the content of goals around which people build their identity (i.e., intrinsic versus extrinsic), individuals are more or less likely to function optimally. Moreover, by viewing the basic psychological needs associated with the self as the energetic basis for identity construction, it becomes clear that processes of need satisfaction (a) help to elucidate whether and to what extent people will make use of effective or immature identity strategies and (b) provide more insight in the conditions that influence whether particular identity construction strategies are adaptive or maladaptive.

## References

- Arnett, J. J. (2002). The psychology of globalization. *American Psychologist*, 57, 774-783.
- Assor, A., Cohen-Malayev, M., Kaplan, A., & Friedman, D. (2005). Choosing to stay religious in a modern world: Socialization and exploration processes leading to an integrated internalization of religion among Israeli Jewish youth. In M. L. Maehr & S. Karabenick, (Eds.), *Advances in motivation and achievement: Vol. 14: Motivation and religion* (pp. 107-152). United Kingdom: Elsevier Press.
- Assor, A., Roth, G., & Deci, E. L. (2004). The emotional costs of parents' conditional regard: A self-determination theory analysis. *Journal of Personality*, 72, 47-88.
- Assor, A., Vansteenkiste, M., & Kaplan, A. (2009). Identified and introjection approach and introjection avoidance motivations in school and in sport: The limited benefits of self-worth strivings. *Journal of Educational Psychology*, 101, 482-497.
- Baumeister, R. & Leary, M. (1995). The need to belong. Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117, 497-529.
- Berzonsky, M. D. (1986). Discovery versus constructivist interpretations of identity formation: Consideration of additional implications. *Journal of Early Adolescence*, 6, 111-117.
- Berzonsky, M. D. (1989). Identity style: Conceptualization and measurement. *Journal of Adolescent Research*, 4, 268-282.
- Berzonsky, M. D. (1990). Self-construction over the life-span: A process perspective on identity formation. *Advances in Personal Construct Psychology*, 1, 155-186.
- Berzonsky, M. D. & Adams, G. R. (1999). Re-evaluating the identity status paradigm: Still useful after 35 years. *Developmental Review*, 19, 557-590.
- Braeckman, A. (2000). *Stromingen in de hedendaagse wijsbegeerte*. [Movements in modern philosophy] Leuven: Acco.

- Brown, K. W. & Kasser, T. (2005). Are psychological and ecological well-being compatible? The role of values, mindfulness, and lifestyle. *Social Indicators Research*, 74, 349-368.
- Chirkov, V. I., Ryan, R. M., Kim, Y., & Kaplan, U. (2003). Differentiating autonomy from individualism and independence: A self-determination theory perspective on internalization of cultural orientations and well-being. *Journal of Personality and Social Psychology*, 84, 97-110.
- Cushman, P. (1990). Why the self is empty: Toward a historically situated psychology. *American Psychologist*, 45, 599-611.
- deCharms, R. (1968). *Personal causation: The internal affective determinants of behavior*. New York: Academic Press.
- Deci, E. L. (1975). *Intrinsic motivation*. New York: Plenum.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum.
- Deci, E. L., & Ryan, R. M. (2000). The “what” and “why” of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11, 227-268.
- Dittmar, H. (2007). The costs of consumer culture and the “cage within”: The impact of the material “good life” and “body perfect” ideals on individuals’ identity and well-being. *Psychological Inquiry*, 18, 23-31.
- Dunkel, C., Soenens, B., Berzonsky, M. D., & Papini, D. (2009). *Parenting processes and identity styles in late adolescence: The moderating and mediating role of parental identification*. Manuscript submitted for publication.
- Duriez, B., Vansteenkiste, M., Soenens, B., & De Witte, H. (2007). The social costs of extrinsic relative to intrinsic goal pursuits: Their relation with social dominance and racial and ethnic prejudice. *Journal of Personality*, 75, 757-782.

- Emmons, R. A. (1986). Personal strivings: An approach to personality and subjective well-being. *Journal of Personality and Social Psychology*, 51, 1058-1068.
- Erikson, E. H. (1968). *Identity: Youth and crisis*. New York: Norton.
- Gergen, K. J. (1991). *The saturated self: Dilemmas of identity in contemporary life*. New York: Basic Books.
- Grolnick, W. S., Deci, E. L., & Ryan, R. M. (1997). Internalization within the family: The self-determination theory perspective. In J. E. Grusec & L. Kuczynski (Eds.), *Parenting and childrens' internalization of values: A handbook of contemporary theory* (pp. 78-99). London: Wiley.
- Grotevant, H. D. (1987). Toward a process model of identity formation. *Journal of Adolescent Research*, 2, 203-222.
- Hodgins, H. S., & Knee, C. R. (2002). The integrating self and conscious experience. In E. L. Deci & R. M. Ryan (Eds.), *Handbook of self-determination research* (pp. 87-100). Rochester, NY: University of Rochester Press.
- Kashdan, T. B., & Fincham, F.D. (2004). Facilitating curiosity: A social and self-regulatory perspective for scientifically based interventions. In P. A. Linley & S. Joseph (Eds.), *Positive psychology in practice* (pp. 482-503). New Jersey: Wiley.
- Kashdan, T. B., Rose, P., & Fincham, F. D. (2004). Curiosity and exploration: Facilitating positive subjective experiences and personal growth opportunities. *Journal of Personality Assessment*, 82, 291-305.
- Kasser, T. (2002). Sketches for a self-determination theory of values. In E. L. Deci & R. M. Ryan (Eds.), *Handbook of self-determination research* (pp. 123-140). Rochester, NY: University of Rochester Press.
- Kasser, T., & Ahuvia, A. C. (2002). Materialistic values and well-being in business students. *European Journal of Social Psychology*, 32, 137-146.

- Kasser, T., Kanner, A., Cohn, S., & Ryan, R. M. (2007). Psychology and American corporate capitalism: Further reflections and future directions. *Psychological Inquiry*, 18, 60-71.
- Kasser, T., & Kasser, V. G. (2001). The dreams of people high and low in materialism. *Journal of Economic Psychology*, 22, 693-719.
- Kasser, T., & Ryan, R. M. (1993). A dark side of the American dream: Correlates of financial success as a central life aspiration. *Journal of Personality and Social Psychology*, 65, 410-422.
- Kasser, T., & Ryan, R. M. (1996). Further examining the American dream: Differential correlates of intrinsic and extrinsic goals. *Personality and Social Psychology Bulletin*, 22, 280-287.
- Kasser, T., & Ryan, R. M. (2001). Be careful for what you wish: Optimal functioning and the relative attainment of intrinsic and extrinsic goals. In P. Schmuck & K. M. Sheldon (Eds.), *Life goals and well-being: Towards a positive psychology of human striving* (pp. 116-131). Goettingen, Germany: Hogrefe & Huber.
- Kasser, T., & Sheldon, K. M. (2000). Of wealth and death: Materialism, mortality salience, and consumption behavior. *Psychological Science*, 11, 352-355.
- Kernis, M. H., & Goldman, B. M. (2006). A multicomponent conceptualization of authenticity: Research and theory. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (pp. 284-357). San Diego, CA: Academic Press.
- Kerpelman, J. L., Pittman, J. F., & Lamke, L. K. (1997). Toward a microprocess perspective on adolescent identity development: An identity control theory approach. *Journal of Adolescent Research*, 12, 325-346.
- Kins, E., Beyers, W., Soenens, B., & Vansteenkiste, M. (2009). Patterns of home leaving and subjective well-being in emerging adulthood: The role of motivational processes and parental autonomy support. *Developmental Psychology*, 45, 1416-1429.



- Koestner, R., & Losier, G. F. (2002). Distinguishing three ways of being highly motivated: A closer look at introjection, identification, and intrinsic motivation. In E. L. Deci & R. M. Ryan (Eds.), *Handbook of self-determination research* (pp. 101-121). Rochester, NY: University of Rochester Press.
- La Guardia, J. G. (2009). Developing who I am: A self-determination theory approach to the establishment of healthy identities. *Educational Psychologist, 44*, 90-104.
- Luyckx, K., Goossens, L., & Soenens, B. (2006). A developmental contextual perspective on identity construction in emerging adulthood: Change dynamics in commitment formation and commitment evaluation. *Developmental Psychology, 42*, 366-380.
- Luyckx, K., Soenens, B., Berzonsky, M., Vansteenkiste, M., Smits, I., & Goossens, L. (2007). Information-oriented identity processing, identity consolidation, and well-being: The moderating role of autonomy and self-rumination. *Personality and Individual Differences, 43*, 1099-1111.
- Luyckx, K., Soenens, B., Vansteenkiste, M., Berzonsky, M. D., & Goossens, L. (2007). Parental psychological control and dimensions of identity formation in emerging adulthood. *Journal of Family Psychology, 21*, 546-550.
- Luyckx, K., Vansteenkiste, M., Goossens, L., & Duriez, B. (2009). Basic need satisfaction and identity exploration and commitment: Bridging self-determination theory and process-oriented identity research. *Journal of Counseling Psychology, 56*, 276-288.
- Marcia, J. E. (1966). Development and validation of ego identity status. *Journal of Personality and Social Psychology, 3*, 551-558.
- Marcia, J. E. (1980). Identity in adolescence. In J. Adelson (Ed.), *Handbook of Adolescent Psychology* (pp.159-187). New York: Wiley.

- Markus, H. R., Kitayama, S., & Heiman, R. J. (1996). Culture and basic psychological principles. In E. T. Higgins & A. W. Kruglanski (Eds.), *Social psychology: Handbook of basic principles* (pp. 857–913). New York: Guilford Press.
- Meyer, B., Enström, M. K., Harstveit, M., Bowles, D. P., & Beevers, C. G. (2007). Happiness and despair on the catwalk: Need satisfaction, well-being, and personality adjustment among fashion models. *Journal of Positive Psychology*, 2007, 2-17.
- Niemiec, C. P., Ryan, R. M., & Brown, K. W. (2008). The role of awareness and autonomy in quieting the ego: A self-determination theory perspective. In H. A. Wayment & J. J. Bauer (Eds.), *Transcending self-interest: Psychological explorations of the quiet ego* (pp. 107-116). Washington, DC: APA.
- Piaget, J. (1977). *The development of thought*. Oxford, England: Basil Blackwell.
- Richins, M. L. & Dawson, S. (1992). A consumer value orientation for materialism and its measurement: Scale development and validation. *Journal of Consumer Research*, 19, 303-316.
- Ryan, R. M. (1982). Control and information in the intrapersonal sphere: An extension of cognitive evaluation theory. *Journal of Personality and Social Psychology*, 43, 450-461.
- Ryan, R. M. (1993). Agency and organization: Intrinsic motivation, autonomy and the self in psychological development. In J. Jacobs (Ed.), *Nebraska Symposium on Motivation: Vol. 40. Developmental perspectives on motivation* (pp. 1-56). Lincoln: University of Nebraska Press.
- Ryan, R. M., & Brown, K. W. (2003). Why we don't need self-esteem: Basic needs, mindfulness, and the authentic self. *Psychological Inquiry*, 14, 71-76.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, 68-78.

- Ryan, R. M., & Deci, E. L. (2003). On assimilating identities to the self: A self-determination theory perspective on internalization and integrity within cultures. In M. R. Leary & J. P. Tangney (Eds.), *Handbook of self and identity* (pp. 253-274). New York: Guilford Press.
- Ryan, R. M., Deci, E. L., Grolnick, W. S., & La Guardia, J. G. (2006). The significance of autonomy and autonomy support in psychological development and psychopathology. In D. Cicchetti & D. Cohen (Eds.) *Developmental Psychopathology: Vol. 1. Theory and Methods* (2<sup>nd</sup> ed., pp. 795-849). New York: Wiley.
- Ryan, R. M., Huta, V., & Deci, E. L. (2008). Living well: A self-determination theory perspective on eudaimonia. *Journal of Happiness Studies*, 9, 139-170.
- Schachter, E. P. (2004). Identity configurations: A new perspective on identity formation in contemporary society. *Journal of Personality*, 72, 167-199.
- Schwartz, S. J., Kurtines, W. M., & Montgomery, M. J. (2005). A comparison of two strategies for facilitating identity formation processes in emerging adults: An exploratory study. *Journal of Adolescent Research* 20, 309-345.
- Schwartz, S. J., Mullis, R. L., Waterman, A. S., & Dunham, R. M. (2000). Ego identity status, identity style, and personal expressiveness: An empirical investigation of three convergent constructs. *Journal of Adolescent Research*, 15, 504-521.
- Sedikides, C., & Gregg, A. P. (2003). Portraits of the self. In M. A. Hogg & J. Cooper (Eds.), *Sage handbook of social psychology* (pp.110-138). London: Sage.
- Sedikides, C., & Strube, M. J. (1997). Self-evaluation: To thine own self be good, to thine own self be sure, to thine own self be true, and to thine own self be better. In M. P. Zanna (Ed.), *Advances in Experimental Social Psychology*, 29, 209-269. New York, NY: Academic Press.

- Sheldon, K. M. (2004). The benefits of a “sidelong” approach to self-esteem and need satisfaction: Comment on Crocker and Park (2004). *Psychological Bulletin*, 130, 421-424.
- Sheldon, K. M., & Elliot A. J. (1999). Goal striving, need-satisfaction, and longitudinal well-being: The self-concordance model. *Journal of Personality and Social Psychology*, 76, 482-497.
- Sheldon, K. M., & Elliot, A. J. (1998). Not all personal goals are "personal": Comparing autonomous and controlling goals on effort and attainment. *Personality and Social Psychology Bulletin*, 24, 546-557.
- Sheldon, K. M., Gunz, A., Nichols, C. P., & Ferguson, Y. (2010). Extrinsic value orientation and affective forecasting: Overestimating the rewards, underestimating the costs. *Journal of Personality*, 78, 149-178.
- Sheldon, K. M., & Kasser, T. (1995). Coherence and congruence: Two aspects of personality integration. *Journal of Personality and Social Psychology*, 68, 531-543.
- Sheldon, K. M., & Kasser, T. (2008). Psychological threat and extrinsic goal striving. *Motivation and Emotion*, 32, 37-45.
- Sheldon, K. M., Ryan, R. M., Deci, E. L., & Kasser, T. (2004). The independent effects of goal contents and motives on well-being: It's both what you do and why you do it. *Personality and Social Psychology Bulletin*, 30, 475-486.
- Smits, I., Soenens, B., Luyckx, K., Berzonsky, M., Duriez, B. & Goossens, L. (2008). Parenting dimensions and identity styles: Exploring the socialization of adolescents' processing of identity-relevant information. *Journal of Adolescence*, 31, 151-164.
- Smits, I., Soenens, B., Luyckx, K., Duriez, B., & Goossens, L. (2007, May). *Extrinsic versus intrinsic goals and identity styles: A longitudinal examination*. Poster presented at the Self Determination Theory Conference. Toronto, 24-27 May, 2007.

- Smits, I., Soenens, B., Vansteenkiste, M., Luyckx, K., & Goossens, L. (in press). Why do adolescents gather information or stick to parental norms? Examining autonomous and controlled motives behind adolescents' identity style. *Journal of Youth and Adolescence*.
- Soenens, B., Berzonsky, M. D., Vansteenkiste, M., Beyers, W., & Goossens, L. (2005). Identity styles and causality orientations: In search of the motivational underpinnings of the identity exploration process. *European Journal of Personality*, 19, 427-442.
- Soenens, B., Berzonsky, M. D., Vansteenkiste, M., Dunkel, C., & Papini, D. (submitted). *Are all identity commitments created equal? The importance of motives for commitment for late adolescents' well-being*. Manuscript submitted for publication.
- Suh, E., Diener, E., Oishi, S., & Triandis, H. C. (1998). The shifting basis of life satisfaction judgments across cultures: Emotions versus norms. *Journal of Personality and Social Psychology*, 74, 482-493.
- Vansteenkiste, M., Duriez, B., Simons, J., & Soenens, B. (2006). Materialistic values and well-being among business students: Further evidence for their detrimental effect. *Journal of Applied Social Psychology*, 36, 2892-2908.
- Vansteenkiste, M., Niemiec, C. P., & Soenens, B. (in press). The five mini-theories of Self-Determination Theory: An historical overview, emerging trends, and future directions. *Advances in Motivation and Achievement*.
- Vansteenkiste, M., Ryan, R. M., & Deci, E. L. (2008). Self-determination theory and the explanatory role of psychological needs in human well-being. In L. Bruni, F. Comim, & M. Pugno (Eds.), *Capabilities and happiness* (pp. 187-223). Oxford, UK: Oxford University Press.
- Vansteenkiste, M., Soenens, B., & Duriez, B. (2008). Presenting a positive alternative to strivings for material success and the thin-ideal: Understanding the effects of extrinsic

- relative to intrinsic goal pursuits. In S. L. Lopez (Ed.), *Positive psychology: Exploring the best in people. Vol. 4: Pursuing human flourishing* (pp. 57-86). Westport, CT: Greenwood Publishing Company.
- Waterman, A. S. (1984). Identity formation: Discovery or creation? *Journal of Early Adolescence, 4*, 329-341.
- Waterman, A. S. (1993). Two conceptions of happiness: Contrasts of personal expressiveness (eudaimonia) and hedonic enjoyment. *Journal of Personality and Social Psychology, 64*, 678-691.
- Waterman, A. S. (2005). When effort is enjoyed: Two studies of intrinsic motivation for personally salient activities. *Motivation and Emotion, 29*, 165-188.
- Whitbourne, S. K., & Collins, K. J. (1998). Identity processes and perceptions of physical functioning in adults: Theoretical and clinical implications. *Psychotherapy, 35*, 519-530.
- Whitbourne, S., Sneed, J. R., & Skultety, K. M. (2002). Identity processes in adulthood: Theoretical and methodological challenges. *Identity: An International Journal of Theory and Research, 2*, 29-45.
- White, R. (1959). Motivation reconsidered: The concept of competence. *Psychological Review, 66*, 279-333.